

CLAIMS

1. A blender comprising:
 - a processing tool having a shaft;
 - a body including:
 - a motor;
 - a collet for removably coupling the processing tool to the motor; the collet being connected to the motor at a first end; the collet including a collet body and at least two extensions forming a shaft-receiving portion at a second end; and
 - a spring connected to the collet body such that the spring forces the at least two extensions inwardly;
 - wherein the shaft of the processing tool is received within the shaft-receiving portion to bias the at least two extensions outwardly to form a friction-fit engagement to secure the processing tool.
2. The blender of claim 1 wherein the collet body includes a third extension; the three extensions forming the shaft-receiving portion.
3. The blender of claim 1 wherein the motor includes a drive shaft and the collet body includes a bore at the first end for receiving the drive shaft; the collet being secured to the drive shaft.
4. The blender of claim 1 wherein the extensions have an inner surface shaped to conform to the shaft when coupled.
5. The blender of claim 1 wherein the extensions substantially encompass the shaft.

6. A processing tool for a blender comprising:
 - a shaft configured to couple to a blender at a first end;
 - a body connected to the shaft at a second end; the body having a working portion; the working portion having a top surface and a bottom surface interconnected by a sidewall; the working portion includes at least a first opening extending between the top surface and the bottom surface; the first opening includes a leading end interconnected to a trailing end; wherein at least a portion of the trailing end forms an angle with the bottom surface that is less than 90 degrees.
7. The processing tool of claim 6 wherein at least a portion of the leading end forms an angle with the top surface that is less than 90 degrees.
8. The processing tool of claim 6 wherein the processing tool is adapted for rotation such that the leading end leads in the rotation.
9. The processing tool of claim 6 wherein the top surface is parallel to the bottom surface.
10. The processing tool of claim 6 wherein the working portion is substantially circular in shape.
11. The processing tool of claim 6 wherein the body includes a shaft-receiving portion; the shaft being received within the shaft-receiving portion.
12. The processing tool of claim 6 wherein the leading end of the opening is curved.
13. The processing tool of claim 6 wherein the first opening includes an outer side interconnected to an inner side.

14. The processing tool of claim 13 wherein the outer side of the first opening is curved.

15. The processing tool of claim 13 wherein the outer side of the first opening is substantially parallel to the sidewall.

16. The processing tool of claim 13 wherein the inner side of the first opening is curved.

17. The processing tool of claim 13 wherein at least a portion of the inner side extends between the top surface and the bottom surface at an angle of less than 90 degrees with respect to the bottom surface.

18. The processing tool of claim 13 wherein at least a portion of the outer side extends between the top surface and the bottom surface at an angle of less than 90 degrees with respect to the bottom surface.

19. The processing tool of claim 13 wherein at least a portion of the outer side extends between the top surface and the bottom surface at an angle of approximately 80 degrees to approximately 90 degrees with respect to the bottom surface.

20 The processing tool of claim 13 wherein at least a portion of the leading end extends between the top surface and the bottom surface at an angle that is less than 90 degrees with respect to the top surface; wherein at least a portion of the outer side extends between the top surface and the bottom surface at an angle that is less than 90 degrees with respect to the bottom surface; and wherein at least a portion of the inner

side extends between the top surface and the bottom surface at an angle that is less than 90 degrees with respect to the bottom surface.

21. The processing tool of claim 13 wherein at least a portion of both the outer side and the inner side form the trailing end.

22. The processing tool of claim 6 wherein the leading end is wider than the trailing end such that the first opening narrows from the leading end towards the trailing end.

23. The processing tool of claim 6 further including a second opening extending between the top surface and the bottom surface; the second opening includes a leading end interconnected to a trailing end; wherein at least a portion of the trailing end forms an angle with the bottom surface that is less than 90 degrees.

24. The processing tool of claim 23 wherein at least a portion of the leading end of the second opening forms an angle with the top surface that is less than 90 degrees.

25. The processing tool of claim 23 wherein the second opening includes an outer side interconnected to an inner side.

26. The processing tool of claim 25 wherein the outer side of the second opening is curved.

27. The processing tool of claim 25 wherein the outer side of the second opening is substantially parallel to the sidewall.

28. The processing tool of claim 25 wherein the inner side of the second opening is curved.

29. The processing tool of claim 25 wherein at least a portion of the inner side extends between the top surface and the bottom surface at an angle of less than 90 degrees with respect to the bottom surface.

30. The processing tool of claim 25 wherein at least a portion of the outer side extends between the top surface and the bottom surface at an angle of less than 90 degrees with respect to the bottom surface.

31. The processing tool of claim 25 wherein at least a portion of the outer side extends between the top surface and the bottom surface at an angle of approximately 80 degrees to approximately 90 degrees with respect to the bottom surface.

32. The processing tool of claim 25 wherein at least a portion of the leading end extends between the top surface and the bottom surface at an angle that is less than 90 degrees with respect to the top surface; wherein at least a portion of the outer side extends between the top surface and the bottom surface at an angle that is less than 90 degrees with respect to the bottom surface; and wherein at least a portion of the inner side extends between the top surface and the bottom surface at an angle that is less than 90 degrees with respect to the bottom surface.

33. The processing tool of claim 25 wherein at least a portion of both the outer side and the inner side form the trailing end.

34. The processing tool of claim 25 wherein the leading end is wider than the trailing end such that the first opening narrows from the leading end towards the trailing end.

35. The processing tool of claim 6, wherein the first opening includes a shape selected from the group consisting of a paisley shape, a tear-drop shape, a circle, and a triangle.

36. A processing tool for a blender comprising:

a shaft configured to couple to a blender at a first end;

a body connected to the shaft at a second end; the body having a working portion; the working portion including a wire frame having an first portion interconnected to a second portion; the first portion being closer to the first end than the second portion; the first portion being connected to the body; wherein as the wire frame rotates, the wire frame defines a cross-sectional area at the first portion that is smaller than the cross-sectional area defined by the wire frame at the second portion; wherein the cross-sectional area defined by the wire frame at the first portion is substantially constant throughout the upper portion; and wherein the cross-sectional area defined by the wire frame at the second portion increases with distance towards the second end.

37. The processing tool of claim 36 wherein the wire frame includes a first wire and a second wire; the first wire having a first and a second end; the second wire having a first and a second end; wherein the ends of the first and second wire are connected to the body.

38. The processing tool of claim 36 wherein the wire frame includes a third portion located between the first portion and the second portion; wherein as the wire frame rotates, the wire frame defines a cross-sectional area at the third portion that is smaller than the cross-sectional area defined by the wire frame at the second portion; and wherein the cross-sectional area defined by the wire frame at the third portion is larger than the cross-sectional area defined by the wire frame at first portion.

39. The processing tool of claim 38 wherein the cross-sectional area defined by the third portion is substantially constant throughout the waist portion.

40. The processing tool of claim 36 wherein the wire frame of the second portion defines a pyramid-like shape.

41. A container for use with a hand-held blender having a processing tool attached thereto comprising:

- a sidewall interconnected to a base; the sidewall and base defining an interior and an opening; and

- a lid adapted to be received in the opening; the lid includes a blender opening configured to insert the hand-held blender therethrough and into the container interior;

- wherein the container is adapted to rest the blender against the lid at the blender opening such that the processing tool of the blender is spaced from the base.

42. The container of claim 41 wherein the base is concave with respect to the interior.

43. The container of claim 42 wherein at least a portion of the working portion is located within the concavity of the base.

44. The container of claim 41 wherein the sidewall includes a spout defining a spout opening.

45. The container of claim 44 wherein the lid includes a lip adapted to at least partially cover the spout opening.

46. A blender comprising:

- a processing tool;

- a housing;

- a motor located within the housing; the processing tool being coupled to the motor to be rotatably driven by the motor; the motor includes a first motor terminal and a second motor terminal;

- a battery cartridge located within the housing; the battery cartridge adapted to receive at least one battery; the battery cartridge having a first end and a second end; the battery cartridge including a first cartridge terminal and a second cartridge terminal at the second end;

- a actuator coupled to the first end of the battery cartridge;

- a circuit board located between the motor and the battery cartridge; the circuit board being adapted to electrically connect to the at least one battery to power the motor; the circuit board including a resilient first contact, a resilient second contact, a third contact, and at least one resistor; wherein the resilient first contact is electrically connected to the first motor terminal through the resistor; the resilient second contact is electrically connected to the second motor terminal; the third contact is electrically connected to the first motor terminal; the resilient first contact being located above the third contact;

- a first spring attached to the battery cartridge; the first spring extending from the second end of the battery cartridge;

- wherein the battery cartridge is spaced from the circuit board by the first spring such that the blender is not activated;

- wherein depressing the actuator compresses the first spring to a first position in which the first cartridge terminal and the second cartridge terminal are in contact with the resilient first contact and the resilient second contact, respectively, to activate the motor to rotate the processing tool at a first speed;

wherein depressing the actuator further compresses the first spring further to a second position in which the resilient first contact is flexed to contact the third contact to activate the motor to rotate the processing tool at a second speed; the second speed being greater than the first speed due to the resistor being shunted out of the circuit when the resilient first contact contacts the third contact.

47. The blender of claim 46 wherein the battery cartridge includes a protrusion and a coaxial collar encompassing the protrusion to define a spring-receiving portion therebetween; the first spring being secured in the spring-receiving portion.

48. The blender of claim 46 further including a second spring; the second spring extending from the second end of the battery cartridge by a shorter distance relative to the first spring such that the second spring is engaged when in the second position.

49. The blender of claim 47 further including a second spring; the second spring extending from the second end of the battery cartridge by a shorter distance relative to the first spring; wherein the second spring is coaxial relative to the first spring; the second spring being secured to the collar; the second spring is engaged when in the second position.

50. The blender of claim 47 wherein releasing pressure on the actuator allows the spring force generated by the first spring to push the cartridge away from the motor such that the resilient first contact flexes towards a first position in which the resilient first contact does not contact the third contact; the first and second cartridge terminals contacting the resilient first contact and the resilient second contact to activate the motor at the first speed.

51. The blender of claim 50 wherein further releasing pressure on the actuator allows the spring force generated by the first spring to push the cartridge further away from the motor such that at least one of the first and second cartridge terminals does not contact at least one of the resilient contacts.

52. The blender of claim 46 wherein the second cartridge terminal is resilient such that it flexes when contacting the second contact.